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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,303	02/18/2002	Timothy Michael Rooney	DN1999216USA	2004

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The Goodyear Tire & Rubber Company
Patent & Trademark Department D823
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EXAMINER	
MAKI, STEVEN D	

ART UNIT	PAPER NUMBER
1733	4

DATE MAILED: 12/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

cb4

Office Action Summary	Application No.	Applicant(s)	
	10/069,303	ROONEY, TIMOTHY MICHAEL	
	Examiner	Art Unit	
	Steven D. Maki	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-8 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-8 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

1) This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

2) The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3) Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 line 7 ambiguously refers to "the surface". In claim 1 line 7, it is suggested to change "the surface" to --the radially outermost surface--.

In claim 1 line 9, there is no antecedent basis for "the traction elements". In claim 1 line 9, it is suggested to change "the traction elements" to --the tread elements--.

In claim 4, the description of the one or more tread elements being "substantially axially with" the openings is ambiguous. In claim 4, should "substantially axially with" be --substantially at the same axial location as--?

In claim 4, it is unclear if the tread elements (80) described therein have the maximum depth (d). In claim 4, it is suggested to insert --having the maximum depth (d) and being-- after "tread elements (80)".

In claim 6, the claimed size of the area is ambiguous. In claim 6 line 2, it is suggested to delete --(mm)--.

4) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

French '193

6) **Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by French '193 (FR 2201193).**

The claimed tire is anticipated by the tire shown in figure and described in the abstract of French '193. French's 193's tire has a self cleaning tread pattern. The claimed elongated lugs read on ribs 1. The claimed soil discharge channels read on the "channels" between the ribs 1. The claimed tread elements read on the subsidiary ribs 3 of less height which are parallel to the ribs 1. The limitation of the tread elements being positioned in an opening at an axially inner location where soil discharge channels merge in the center of the tread reads on the subsidiary ribs 3 positioned at the center of the tread.

Claim 1 fails to exclude soil discharge channels merging so as to define a single continuous soil discharge channel.

Harms

7) **Claims 1, 3 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Harms (US 5259429).**

The claimed tire is anticipated by the tire having the tread shown in figure 9 of Harms. Harms tire is an ATV tire. The claimed elongated lugs and soil discharge channels read on the elongated lugs 70, 72, 74 and the "soil discharge channels" they define. The claimed tread elements read on the letters 110 each of which projects outwardly a distance less than the height of the elongated lugs 70, 72 and 74. For example, the claimed tread elements read on the letter "M" which has "at least one side" substantially parallel to the adjacent elongated lug 70. Another example: The claimed tread elements read on the letter "R" which has at least one side parallel to the adjacent elongated lug 70.

Claim 1 fails to exclude tread elements being in the form of letters.

As to claim 3, Harms elongated lugs have curved leading and trailing edges.

As to claim 7, Harms' tire is an ATV tire.

8) **Claims 2, 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harms (US 5259429).**

As to claim 2, it would have been obvious to one of ordinary skill in the art to radially incline the sidewalls of the letters in the figure 9 embodiment since (1) Harms teaches that the relatively low height letters replace the relatively low height projections and (b) Harms teaches radially inclining the sidewall(s) of the projections (i.e. provide the projections as frustoconical projections or pyramid shaped projections); it being noted that Harms teaches that the letters and the projections serve the same function of increasing resistance to flow of earth.

As to claim 6, it would have been obvious to one of ordinary skill in the art to provide the upper surface of the letters with the claimed surface area of at least 0.25 square inches since Harms teaches using the letters to form words which are intended to be seen (visibility of the letters increasing with increasing size of the letters).

As to claim 8, it would have been obvious to one of ordinary skill in the art to provide Harms' ATV tire with a carcass reinforced by a ply structure having two or more bias angled plies since an ATV tire having a carcass reinforced by a ply structure having two or more bias angled plies is taken as well known / conventional tire construction for an ATV tire.

Fukasawa et al

9) **Claims 1, 2, 4 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Fukasawa et al (US 5180453).**

The claimed tire is anticipated by the tire shown in figure 1a or 3a. The claimed elongated lugs read on the island portions. The claimed soil discharge channels read on the lug grooves. The claimed tread elements read on the step protrusions 44.

Claim 1 fail to require a net to gross different from that of Fukasawa et al's tire . For example, Claim 1 fails to require a net to gross of less than 25%.

As to claims 2 and 6, see tread element shown in figures 10-10c or tread element shown in figure 11b. Fukasawa et al's step protrusions for a heavy duty pneumatic tire inherently have the claimed tread element surface area of at least 0.25 square inches.

As to claim 4, see figure 3a.

Rooney

10) **Claims 1, 3-5 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rooney (WO 98/03356) in view of Great Britain '335 (GB 1236335) and French '193 (FR 2201193).**

Rooney substantially discloses the claimed tire except for the tread elements. In Rooney's figure 2, the off road ATV tire has elongated lugs and blocks. As claims 1, 3-5 and 7-8, it would have been obvious to one of ordinary skill in the art to provide the tread of Rooney's off road tire (ATV tire) with the claimed tread elements in view of Great Britain '335 and French '193's suggestion to locate relatively low height tread elements (low height bars / ribs) between lugs (main bars / ribs) to improve the self cleaning of the tire (prevent the tread from clogging up with earth).

As to the dependent claims: As to claim 3, Rooney shows curved elongated lugs. As to claim 4, the limitation therein would have been obvious since (a) Rooney shows forming the opening 62 between the lug and the block in a "shoulder region" and (b) Great Britain '335 and French '193 suggest locating the low height tread elements at the "shoulder region" of the tire. As to claim 5, the claimed concave curvature would have been obvious since Rooney shows curved lugs and Great Britain '335 and French '193 suggests providing the low height tread elements such that they are parallel to the lugs. As to claims 7 and 8, Rooney teaches a bias ATV tire.

11) **Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rooney (WO 98/03356) in view of Great Britain '335 (GB 1236335) and French**

'193 (FR 2201193) as applied above and further in view of French '341 (FR 1163341).

As to claims 2 and 6, it would have been obvious to radially incline the walls of the low height tread elements suggested by Great Britain '335 and French '193 for obtaining self cleaning by at least 8 degrees in view of French '341's suggestion to provide a low height protrusion (for preventing stone trapping / cutting of groove bottom) with various cross-sectional forms including those with radially inclined walls. During a partial oral translation of French '341 by a PTO translator, the following information was obtained: Prior art treads have sculptures / recesses to improve adhesion. Areas of the tread are vulnerable to tears / retaining cutting objects such as pebbles from the road surface deteriorating the bottom. This tendency is reduced / eliminated by providing a specific shape comprising protruding elements placed at the bottom of the recesses. The results include (1) protection of the bottom of the recess from cuts by cutting objects and (2) suppression / reduction of retention in sculptures. Prior to being encrusted in the walls, pebbles are expelled due to movement / deformation of the tread. Figures 11-17 are cross sections of sculptures having various possible shapes of protrusion. The claimed upper surface area of at least .25 square inches would have been obvious and could have been determined without undue experimentation in view of Great Britain '335 and French '193's teaching to use the low height tread elements so that the tread is self cleaning.

Remarks

12) The remaining references are of interest.

13) No claim is allowed.

14) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is 703-308-2068 until Dec. 18, 2003 and (571) 272-1221 after Dec. 18, 2003. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (703) 308-3853. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Steven D. Maki
November 25, 2003

STEVEN D. MAKI 11-25-03
PRIMARY EXAMINER
~~GROUP 1300~~
AU 1733